**WHAT IS CLAIMED:**

1. A toy gun for launching a foam projectile, the toy gun comprising:

a housing having an outlet and an inlet, both the outlet and the inlet sized to permit passage of the projectile;

a launch station disposed in the housing, the launch station arranged to receive the projectile from the inlet;

a crank mounted to the housing;

a resilient actuating paddle disposed within the housing and mounted to an axle, the axle rotatable in response to rotation of the crank, the paddle shiftable between an undeflected position and an energy storing deflected position, the paddle moveable along a path in response to rotation of the axle and sized to extend into the launch station; and

a post disposed in the path, the post positioned to shift the paddle to the deflected position in response to rotation of the axle, the paddle arranged to disengage the post in response to continued rotation of the axle thereby releasing stored energy as the paddle returns to the undeflected position and travels through the launch station.

2. The toy gun of claim 1, including a feed tube sized to hold a plurality of the projectiles, the feed tube removably attached to the housing and arranged to communicate projectiles to the inlet.

3. The toy gun of claim 1, wherein the axle includes a plurality of resilient actuating paddles.

4. The toy gun of claim 1, including a stop disposed adjacent the inlet, the stop shiftable between a first position in which the stop prevents a projectile from entering the launch station and a second position in which the stop permits a projectile to enter the launch station.

5. The toy gun of claim 4, wherein the stop is shiftable between the first position and the second position in response to rotation of the axle.

6. The toy gun of claim 1, wherein the projectile comprises a ball, and including a first stop, a second stop, and a feed station disposed adjacent the inlet, the first stop and the second stop cooperating to permit only a single ball at a time to enter the feed station and the launch station, the first and second stops responsive to movement of the paddle.

7. The toy gun of claim 1, wherein the housing includes a constriction between the launch station and the outlet, the constriction sized to maintain the projectile in the launch station, the constriction further sized to permit passage of the projectile from the launch station to the outlet in response to the application of a force to the projectile.

8. The toy gun of claim 1, wherein the crank is operatively coupled to the paddle wheel by a gear train.

9. The toy gun of claim 8, including a pivot lever disposed adjacent the inlet and arranged to shift in response to mounting a feed tube to the housing adjacent to the inlet, and including a cam plate disposed in the gear train and shiftable between a first state in which the crank

and the paddle wheel are operatively decoupled and a second state in which the crank and the paddle wheel are operatively coupled, the cam plate responsive to movement of the pivot lever.

10. The toy gun of claim 9, wherein the pivot lever is operatively connected to the cam plate by a link arm.

11. The toy gun of claim 1, including a feed control mechanism disposed adjacent the inlet.

12. The toy gun of claim 11, wherein the feed control mechanism includes a first stop and a second stop.

13. The toy gun of claim 12, wherein the first and second stops are arranged to respond to respond to movement of the paddle wheel.

14. The toy gun of claim 1, wherein the projectile comprises a ball, and including a feed tube mountable to the housing and arranged to hold a plurality of the balls, at least one of the housing and the inlet arranged to define a feed station, and including a first stop disposed adjacent the feed station and arranged to shift between a first position in which a ball is retained at the feed station and a second position in which a ball may pass from the feed station toward the launch station.

15. The toy gun of claim 14, including a second stop disposed adjacent the feed station and arranged to shift between a first position in which a ball is prevented from entering the feed station and a second position in which a ball may pass into the feed station.

16. The toy gun of claim 15, wherein the first stop and the second stop are responsive to movement of the paddle wheel.

17. A toy gun for launching a foam projectile, the toy gun comprising:

a housing having an outlet and an inlet, both the outlet and the inlet sized to permit passage of the projectile;

a launch station disposed in the housing, the launch station arranged to receive the projectile from the inlet;

a crank mounted to the housing;

a paddle wheel disposed within the housing and having a plurality of resilient actuating paddles, the paddle wheel mounted to a rotatable axle, the axle operatively coupled to the crank;

each paddle shiftable between an undeflected position and an energy storing deflected position, each paddle moveable along a path in response to rotation of the axle and sized to extend into the launch station; and

a post disposed in the path, the post positioned to shift each paddle in succession to the deflected position in response to rotation of the axle, each paddle arranged to disengage the post in response to continued rotation of the axle thereby releasing stored energy as the paddle returns to the undeflected position and travels through the launch station.

18. The toy gun of claim 17, including a feed tube sized to hold a plurality of the projectiles, the feed tube removably attached to the housing and arranged to

communicate projectiles to the inlet, at least one of the housing and the inlet arranged to define a feed station, and including a first stop disposed adjacent the feed station and arranged to shift between a first position in which a projectile is retained at the feed station and a second position in which a projectile may pass from the feed station toward the launch station.

19. The toy gun of claim 18, including a second stop disposed adjacent the feed station and arranged to shift between a first position in which a projectile is prevented from entering the feed station and a second position in which the projectile may pass the second stop and enter the feed station.

20. The toy gun of claim 19, including a pivot lever disposed adjacent the paddle wheel and movable in response to the passage of each paddle, the pivot lever cooperating with the first stop and the second stop to maintain the first stop in the first position when the second stop is in the second position, and further to maintain the first stop in the second position when the second stop is in the first position.

21. The toy gun of claim 17, wherein the crank is operatively coupled to the paddle wheel by a gear train.

22. The toy gun of claim 21, including a pivot lever disposed adjacent the inlet and selectively shiftable between a first position and a second position, and wherein the gear train includes a cam plate and shiftable between a first position in which the crank and the paddle wheel are operatively decoupled and a second state in which the crank

and the paddle wheel are operatively coupled, the cam plate responsive to movement of the pivot lever.

23. A toy gun for launching a foam ball, the toy gun comprising:

a housing having an outlet and an inlet, both the outlet and the inlet sized to permit passage of the ball;

a launch station disposed in the housing, the launch station arranged to receive the ball from the inlet;

a crank mounted to the housing;

a paddle wheel disposed within the housing and having a plurality of resilient actuating paddles, the paddle wheel mounted to a rotatable axle;

a gear train operatively coupling the crank to the axle, the gear train including a clutch, the clutch shiftable between a first position in which the axle is responsive to movement of the crank and a second position in which the axle is not responsive to movement of the crank;

each paddle shiftable between an undeflected position and an energy storing deflected position, each paddle moveable along a path in response to rotation of the axle and sized to extend into the launch station; and

a catch disposed in the path, the catch positioned for abutting contact with a selected one of the paddles as the axle is rotated, the catch arranged to shift the selected paddle to the deflected position in response to further rotation of the axle, the catch arranged to release the selected paddle in response to still further rotation of the axle, the paddle upon release arranged to release stored

energy as the selected paddle returns to the undeflected position and travels through the launch station.

24. A toy gun for launching a foam projectile, the toy gun comprising:

a housing having an outlet, an inlet, and a passage extending between the outlet and the inlet sized to permit passage of the projectile;

a launch station disposed in the housing, the launch station arranged to receive the projectile from the inlet;

a rotatable wheel disposed within the housing and having at least one resilient actuating paddle, the paddle shiftable between an undeflected position and an energy storing deflected position, the paddle moveable along a path in response to rotation of the wheel and sized to extend into the launch station; and

a post disposed in the path, the post positioned to shift the paddle to the deflected position in response to rotation of the wheel, the paddle arranged to disengage the post in response to continued rotation of the wheel thereby releasing stored energy as the paddle returns to the undeflected position and travels through the launch station.